

## **CSREES Portfolio Review Expert Panel Report Summary**

### **Portfolio 3.1 Food Safety CY 1999 – 2003**

#### **SUMMARY**

*External Review Completed: February 2005*

#### **Portfolio Description**

The CSREES Food Safety Portfolio is a component of the Plant and Animal Systems (KAS). The overall aim of the Portfolio is to provide producers, manufacturers, regulatory agencies, and consumers' scientific information and technologies to support their efforts to provide affordable and safe food. The portfolio consists of the following combined Knowledge Areas:

- KA 711 Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources;
- KA 712 Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally occurring Toxins.

#### **Summary of Comments and Recommendations**

In 2005 a panel comprised of independent experts from the field was convened to assess and score the current state of the Food Safety Portfolio. A discussion of specific comments and recommendations related to each of the dimensions of the three Office of Management and Budget (OMB) research and development (R&D) criteria used (relevance, quality, and performance) is provided below.

##### Relevance

The scope of the portfolio is excellent with impressive overall focus and it is responsive to relevant, emerging issues.

The food safety program is highly focused with most funding going toward research on animal-based food products and infectious agents. However, the work funded through the "formula fund programs" was not represented in the portfolio review document other than total dollars that were included in the research dollar totals.

There was considerable discussion on food security and any role CSREES may have in this arena. It is an important activity and is being addressed by several government agencies including the Department of Homeland Security. If additional funding can be obtained for food security, expanding the portfolio into this area would be appropriate.

##### Quality

The portfolio demonstrated a high level of productivity with impressive efforts by staff in seeking stakeholder information and in their responsiveness to identified needs. However, on the outcomes side of the equation, measurement tools were not available to allow for a quantitative assessment to be made. This should not necessarily be viewed as a negative statement because there is an inherent lag in the implementation of research finding (outputs) into producer application (outcomes). Furthermore, the food safety portfolio was relatively new and, in terms of outcomes, it had not had sufficient time to mature. In the same vein, the panel discussed

outcomes with respect to the audience. The level of contemporary, cutting edge technologies being used for funded research was impressive.

### Performance

The portfolio represented great depth and breadth with exemplary productivity relative to the investment. Relative to investment, the productivity was exemplary. It was noted that most of the management money was spent on the pre-award area, with relatively little expended on follow up (post award review) which is commendable.

### General Comments

The breadth, quality, and depth of the portfolio were impressive. Also, the competitive grants programs are jewels within the Agency and ones that should be showcased with pride.

Food safety is a partnership of numerous agencies and evidence is provided that the CSREES Food Safety team is both effective in its interactions with other agencies and that these interactions are having a positive effect on improving the safety of food. The portfolio also emphasizes the significance of outcomes as they relate to federal investment. Several projects, including those related to actual interventions, demonstrate the strong commitments of the programs to the development of real world applications. Additionally, several studies have resulted in basic science information that has the potential to challenge our conventional thinking and study of food safety.

While the competitive grants programs were well described and there was an impressive set of data used to describe the programs, a paucity of data describing formula fund based programs (including Hatch funds and Animal Health 1433 funds) was presented. As an overall recommendation the panel felt that more information was needed to assess formula funded projects.

Although it was agreed little work has been done to develop measures of enhanced public health or to develop target levels for reductions in food borne diseases, these can be an important measure of program success. Further, methods to measure disease attribution need to be developed. All those parties and agencies working in this area should undertake the task of defining the measures of impacts of programs on public health.

### **Comments on Future Directions Presented by CSREES**

Food Safety must be considered in the context of its impact upon public health. Even though microbial food safety issues are highly complex and interventions may not translate to reduction of disease because of the need to affect more than one parameter to affect disease reduction, the program should challenge the scientific community to address this as an area of need.

### Data Issues

There was little quantitative assessment data available to use to evaluate the accomplishments of the portfolio, and information was inadequate regarding Extension activities. This led to Extension activities not being represented even though the Panel was well aware of the extensive Extension activity. Therefore, both quantitative and qualitative criteria should be developed to allow for more objective portfolio assessments. In addition, methods to measure disease attribution need to be developed.

It is further recognized that the need to develop measures of enhanced public health is not just directed at the CSREES food safety programs. All those parties and agencies working in this area should undertake the task of defining the measures of impacts of programs on public health.

#### Evaluation Issues

The data are partially available through CRIS, but there is not an adequate level of staffing to tabulate what data do exist. There is a need for evaluation studies to be conducted for each of the programs covered in the portfolio. It is recommended that formal evaluations be implemented so that the extent to which the portfolio is making progress towards solving national problems and concerns for which funds were obligated can be determined.

#### **Portfolio Score**

Portfolio 3.1 received a total score of 83 from the panel. This score places the portfolio in the category 'moderately effective in supporting CSREES objectives.'

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